## 45612. Pyrus Mamorensis Trabut. Malaceæ.

Pear.

From Rabat, Morocco. Seeds presented by Commandant de Beaucoudrey, Inspector of Forests, at the request of Dr. L. Trabut, Algiers, Algeria. Received December 22. 1917.

"Seeds of a Moroccan pear which occurs with the cork oak in the forest of Moroccan Mamora. It is very resistant to dryness in the sandy noncalcareous soils. The vigorous tree will probably form a good stock. The fruit is rather large, and the seeds are very large." (*Trabut.*)

## 45613 and 45614. Passiflora spp. Passifloraceæ. Granadilla.

From Caracas, Venezuela. Seeds presented by Mr. H. Pittier. Received December 26, 1917.

45613. Passiflora sp.

Possibly a hybrid between Passiflora edulis and P. maliformis, as the seeds do not agree with either, although somewhat resembling each.

## 45614. Passiflora ligularis Juss.

Sweet granadilla.

"Unquestionably one of the best of the granadillas. In Guatemala it is common at altitudes of 4,000 to 7,000 feet, but I have never seen it in the lowlands; it appears, therefore, that it is adapted to subtropical climates and, judging from its presence in portions of Guatemala almost too cold for the avocado, I feel that it ought to succeed in California. The behavior of other species, such as Passiflora edulis, in that State indicates that conditions in general are favorable to the passifloras, and the question has generally been one of hardiness. Many species tested in California have proved to be too tender. P. ligularis, with slight protection during the first winter or two, certainly ought to thrive in the southern half of the State.

"In Guatemala it is a rampant climber, scrambling over trees and buildings and covering them with a canopy of green. It goes to the tops of trees 35 or 40 feet in height. Its foliage is bold, the large cordate leaves being as much as 6 or 8 inches in length.

"The ripening season commences in early fall and extends through the winter. Large plants bear abundantly, yet I have never seen a vine so laden with fruits as some of the plants of *Passiflora edulis* which grow in California gardens. The fruits are commonly  $2\frac{1}{2}$  inches in length and deep orange-yellow in color. Sometimes a purple-fruited variety is seen. The brittle outer shell or pericarp, when broken away at one end, exposes the small elliptic seeds individually inclosed in a juicy, white aril. The aroma of the fruit is delightful; it may properly be termed perfumed. The flavor is equally pleasant and, unlike many other passifloras, is not unduly acid. The fruit is commonly eaten out of hand, for which mode of use it seems best adapted. One can consume a large number of them without any ill effects.

"The fruits are often brought into the markets of Guatemala upon the backs of Indians from distances of a hundred miles. The pericarp is so tough that it is not easily bruised, hence the fruit can be transported without difficulty. It is attractive in appearance and so popular in Guatemala that it realizes higher prices in the markets than most other fruits which compete with it.

"The term granadilla (diminutive of granada, Spanish for pomegranate) is applied in tropical America to the fruits of various passi-